

## Patent Abstracts of Japan

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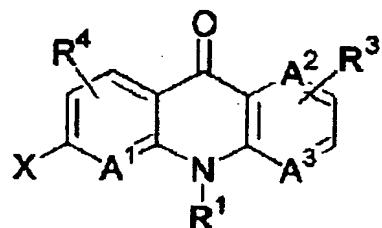
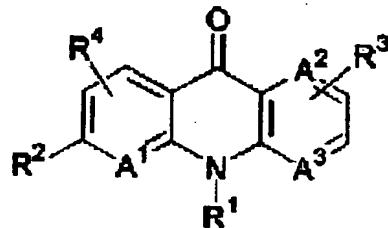
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TITLE : NITROGEN-CONTAINING TRI-OR  
 TETRACYCLIC COMPOUND AND  
 ANTVIRAL AGENT CONTAINING THE  
 SAME COMPOUND



ABSTRACT : PROBLEM TO BE SOLVED: To obtain the subject medicine such as antiherpes viral agent exhibiting excellent antiviral activity and useful as a medicine by including a specific nitrogen-containing tri or tetracyclic compound.

SOLUTION: This antiviral agent contains a nitrogen-containing tri or tetracyclic compound of formula I [R<sup>1</sup> is a (substituted)alkyl or the like; R<sup>2</sup> is a (substituted)aryl or the like; R<sup>3</sup> is H or the like; R<sup>4</sup> is H or the like; A<sup>1</sup> or A<sup>2</sup> is N or the like; A<sup>3</sup> is CH or the like] or its salt [e.g. 2-fluoro-10- methyl-6-(pyridin-4-yl)-9,10-dihydro-9-acylidinone or the like]. The antiviral agent is administered at a daily dose of 0.1-100 mg/kg.adult once or in several portions. The compound of formula I is obtained by subjecting a compound of formula II (X is a leaving group) to coupling reaction with a tin compound of the formula R<sup>2</sup>-Sn (Alk)<sub>3</sub> (Alk is a lower alkyl) in the presence (or absence) of silver oxide and in the presence of a palladium catalyst.

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